



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,596	09/29/2004	Mie Yoshimura	Q83591	8356

23373 7590 03/09/2006
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

PIZIALI, ANDREW T

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/509,596

Applicant(s)

YOSHIMURA ET AL.

Examiner

Andrew T. Piziali

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-11 and 13-28 is/are pending in the application.
- 4a) Of the above claim(s) 11 and 13-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/29/04 & 12/14/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 12/28/2005 has been entered.

Election/Restrictions

2. Applicant's election with traverse of Group I, claims 1-10, and Species 1 from each of Species Groups I-III, in the reply filed on 12/28/2005 is acknowledged. The traversal is on the grounds that the newly amended claims relate to one invention only, or to a group of inventions so linked as to form a single general inventive concept. This is not found persuasive because as evidenced by the below rejection, at least one independent claim of the application does not avoid the prior art. Therefore, the special technical feature of the application is anticipated by or obvious in view of the prior art. Consequently, the claims do not relate to a single general inventive concept under PCT Rule 13.1. Claims 11 and 13-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention. The requirement is still deemed proper and is therefore made FINAL.

Specification

3. The disclosure is objected to because of the following informalities: The "Brief Description of the Drawings" section does not mention Figures 9-11. The specification refers to Patent Documents 1-11, but the documents do not appear to be specifically mentioned.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 claims a 3-component polymer layer formed in addition to the polymers forming said alternate laminated body, but the specification only mentions how to form a 3-component polymer layer comprising said alternate laminated body (see Example 3 on page 35). It appears that the claimed 3-component polymer layer refers to the embodiment shown in Figure 2b wherein the 3-components are 10A, 10B and 10C, but further clarification is required.

Claim Rejections - 35 USC § 102/103

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1771

8. Claims 1, 3-5 and 8-9 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 98/46815 to Asano et al. (hereinafter referred to as Asano) (USPN 6,430,348 is cited as a translation document).

Regarding claims 1, 3-5 and 8-9, Asano discloses an identifying marker (non-woven fabric or embroidery yarn) attached as an identification target to a product (substrate), the identifying marker being characterized in that at least a portion of said identification target is formed by a planar arranged fibrous body made of an optical interference fiber comprising an alternate laminated body obtained by laminating layers of polymers with different refractive indexes in an alternating fashion (see entire document including Figures 1-6, column 2, lines 45-54, column 28, lines 10-26, column 32, lines 44-68, and column 35, lines 17-25).

Asano does not appear to mention P polarized light or S polarized light, but considering that the identifying marker disclosed by Asano is substantially identical to the claimed identifying marker, it appears that if P polarized light and S polarized light are respectively defined as the transmitted light from the polarizing plate slit when the slit axis of the polarizing plate is situated parallel and perpendicular to a direction of orientation of said fibrous body, said fibrous body would inherently have color difference anisotropy between said P polarized light and S polarized light.

The Patent and Trademark Office can require applicants to prove that prior art products do not necessarily or inherently possess characteristics of claimed products where claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes; burden of proof is on applicants where rejection based on inherency under 35 U.S.C. § 102 or on prima facie obviousness under 35 U.S.C. § 103, jointly

Art Unit: 1771

or alternatively, and Patent and Trademark Office's inability to manufacture products or to obtain and compare prior art products evidences fairness of this rejection, *In re Best, Bolton, and Shaw*, 195 USPQ 431 (CCPA 1977).

Regarding claim 3, Asano discloses that the layer thickness may be 0.02-0.3 micrometers for each layer of said alternate laminated body, and the count of layers may be 5-120 layers (see the paragraph bridging columns 3 and 4, and column 6, lines 26-41).

Regarding claim 4, Asano discloses that a protective layer may surround the alternate laminated body (see Figure 2).

Regarding claim 5, Asano discloses that the polymers with different refractive indexes of said alternate laminated body are designated as: polymer A as the polymer with the high refractive index and polymer B as the polymer with the low refractive index, (said polymer A)/(said polymer B) may be the combination of (polyethylene terephthalate having a metal sulfonate salt-containing dibasic acid component copolymerized at 0.3-10 mole percent with respect to the total dibasic acid component)/(polymethyl methacrylate with an acid value of 3 or greater) (see the paragraph bridging columns 6 and 7).

Regarding claim 8, Asano discloses that the identification marker may comprise, as an identifier, a portion wherein the optical interference fiber is used to construct a body of an identifiable size as a nonwoven fabric (column 32, lines 44-67).

Regarding claim 9, Asano discloses that the fibrous body may be a mixture of different types of optical interference fibers having different wavelengths for interference light ranging from the infrared region to the ultraviolet region (column 22, lines 3-34 and column 27, lines 12-18).

Claim Rejections - 35 USC § 103

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/46815 to Asano as applied to claims 1, 3-5 and 8-9 above, and further in view of US 2002/0016117 to Hamajima et al. (hereinafter referred to as Hamajima).

Asano does not appear to mention the fiber possessing an interior polymer layer, but Hamajima discloses that it is known in the optical interference fiber art to insert a polymer layer in the intermediate portion of an alternate laminate optical interference fiber as a reinforcing portion (see entire document including [0013] and Figure 1(c)). It would have been obvious to one having ordinary skill in the art at the time the invention was made to insert a polymer layer in the intermediate portion of the alternate laminate optical interference fiber of Asano, as taught by Hamajima, because the intermediate section would reinforce the fiber.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/46815 to Asano in view of US 2002/0016117 to Hamajima as applied to claim 6 above, and further in view of USPN 4,419,479 to Springer.

Hamajima discloses that intermediate reinforcing polymer layer may comprise a polymer other than the polymer used to form the alternating layers ([0013]), but Hamajima does not appear to mention specific other polymers. Hamajima is silent with regards to specific other polymers, therefore, it would have been obvious to look to the prior art for conventional reinforcing polymers. Springer provides this conventional teaching showing that it is known in the reinforcing polymer art to include fine metal particles in any of a variety of reinforcing polymeric materials to provide the reinforcing polymer with superior abrasion resistance, temperature resistance, and/or impact strength (see entire document including column 1, lines 7-

Art Unit: 1771

21, column 2, lines 6-10 and column 3, lines 33-59). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include fine metal particles in the reinforcing polymer, as taught by Springer, motivated by the expectation of successfully practicing the invention of Hamajima and because the reinforcing polymer layer would possess superior abrasion resistance, temperature resistance, and/or impact strength.

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 98/46815 to Asano (as applied to claims 1, 3-5 and 8-9 above).

Asano discloses that the identification target may have a colored or dyed section containing the optical interference fibers (column 32, lines 60-68). Asano also discloses that the fibers may be shortly cut staple fibers (column 34, lines 12-24). Asano does not appear to specifically mention ink-painting the fibers to form the color, but the examiner takes Official Notice that ink-painting is a known fiber coloring method. It would have been obvious to one having ordinary skill in the art at the time the invention was made to color the fibers by any known method, such as ink-painting, because it is within the general skill of a worker in the art to select a known method of coloring on the basis of its suitability and desired characteristics.

International Search Report "X" Documents

12. JP 11-107109 and EP 1006221 were not used to reject the claims based on the arguments presented in the response filed on 12/28/2005. JP 6-8679 was not used to reject the claims because claim 15, which is the International Search Report "X" claim, is a non-elected claim. JP 4-174707 was not used to reject the claims because claim 16, which is the International Search Report "X" claim, is a non-elected claim. USPN 5,974,150 was not used to reject the claims

Art Unit: 1771

because claims 12 and 13, which are the International Search Report "X" claims, are non-elected claims.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

 1/18/06
ANDREW T. PIZIALI
PATENT EXAMINER